

Title (en)

METHOD AND APPARATUS FOR AMMONIA SYNTHESIS GAS PRODUCTION

Title (de)

METHODE UND VORRICHTUNG ZUR HERSTELLUNG VON AMMONIAKSYNTHESEGAS

Title (fr)

PROCEDE ET APPAREIL DESTINES A LA PRODUCTION D'UN GAZ DE SYNTHESE AMMONIAC

Publication

EP 1517851 B1 20060906 (EN)

Application

EP 03735386 A 20030514

Priority

- EP 0305049 W 20030514
- EP 02014421 A 20020628

Abstract (en)

[origin: EP1375418A1] Method for ammonia production through a catalytic reaction of pressurised synthesis gas in an appropriate compressor with many stages (1, 2), each of which is equipped with an inlet and outlet (1a, 2a, 1b, 2b) for said synthesis gas said method including a purification step through liquid ammonia of said synthesis gas from water and carbon dioxide contained in it. <IMAGE>

IPC 8 full level

C01B 3/02 (2006.01); **B01F 5/04** (2006.01); **C01B 3/52** (2006.01); **C01C 1/04** (2006.01); **B01F 3/04** (2006.01)

CPC (source: EP US)

B01F 25/312 (2022.01 - EP US); **B01F 25/31242** (2022.01 - EP US); **C01B 3/025** (2013.01 - EP US); **C01B 3/52** (2013.01 - EP US); **C01C 1/0405** (2013.01 - EP US); **B01F 23/23** (2022.01 - EP US); **C01B 2203/0415** (2013.01 - EP US); **C01B 2203/0475** (2013.01 - EP US); **C01B 2203/0495** (2013.01 - EP US); **Y02P 20/52** (2015.11 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1375418 A1 20040102; AT E338730 T1 20060915; AU 2003236647 A1 20040119; BR 0312087 A 20050322; BR 0312087 B1 20120515; CA 2489101 A1 20040108; CN 100453445 C 20090121; CN 1665741 A 20050907; DE 60308185 D1 20061019; DE 60308185 T2 20070823; DK 1517851 T3 20070108; EG 24578 A 20091109; EP 1517851 A1 20050330; EP 1517851 B1 20060906; RU 2005102066 A 20050910; RU 2309894 C2 20071110; UA 79126 C2 20070525; US 2005287063 A1 20051229; WO 2004002879 A1 20040108

DOCDB simple family (application)

EP 02014421 A 20020628; AT 03735386 T 20030514; AU 2003236647 A 20030514; BR 0312087 A 20030514; CA 2489101 A 20030514; CN 03815298 A 20030514; DE 60308185 T 20030514; DK 03735386 T 20030514; EG 2003060601 A 20030623; EP 0305049 W 20030514; EP 03735386 A 20030514; RU 2005102066 A 20030514; UA 2005000744 A 20030514; US 51974305 A 20050825